What is claimed is:

1. An MPEG data recorder comprising:

an interface means for receiving a data packet from a digital transmission line transmitting MPEG data in real time, and extracting a predetermined MPEG data from a received packet to output it as a data signal;

a data rate detector means for determining a data rate of MPEG data based on a valid data period, during which the data signal is outputted from the interface means; and

a recording mode selector means for selecting a recording mode based on the determined data rate.

2. The MPEG data recorder as claimed in claim 1,

wherein, the interface means outputs a transmission control signal when the interface means outputs a data signal; and the data rate detector means determines a percentage occupied by the valid data period, by detecting the transmission control signal.

3. The MPEG data recorder as claimed in claim 1,

wherein, the interface means outputs a data signal as an MPEG packet having a predetermined amount of data, and outputs a synchronizing signal in synchronization with the MPEG packet; and the data rate detector means counts the synchronizing signals outputted in a predetermined duration

for detection, and detects the data rate of MPEG data based on the counted value.

4. The MPEG data recorder as claimed in claim **1**,

wherein, the data rate detector means adds up valid data periods in a predetermined period for detection including two or more valid data periods, and detects the data rate of MPEG data based on the added-up value.

5. The MPEG data recorder as claimed in claim **2**,

wherein, the data rate detector means adds up valid data periods in a predetermined period for detection including two or more valid data periods, and detects the data rate of MPEG data based on the added-up value.

6. The MPEG data recorder as claimed in claim **3**,

wherein, the data rate detector means adds up valid data periods in a predetermined period for detection including two or more valid data periods, and detects the data rate of MPEG data based on the added-up value.

7. The MPEG data recorder as claimed in claim **1**,

wherein, the interface means is an IEEE 1394 interface unit, which performs an isochronous communication through an IEEE 1394 link, and the interface means extracts MPEG data of

a predetermined channel from the received packet.

8. The MPEG data recorder as claimed in claim **2**,

wherein, the interface means is an IEEE 1394 interface unit, which performs an isochronous communication through an IEEE 1394 link, and the interface means extracts MPEG data of a predetermined channel from the received packet.

9. The MPEG data recorder as claimed in claim **3**,

wherein, the interface means is an IEEE 1394 interface unit, which performs an isochronous communication through an IEEE 1394 link, and the interface means extracts MPEG data in a predetermined channel from the received packet.

10. The MPEG data recorder as claimed in claim **7**,

wherein, the data rate detector means adds up valid data periods in a predetermined period for detection including two or more isochronous cycles, and detects the data rate of MPEG data based on the added-up value.

11. The MPEG data recorder as claimed in claim **8**,

wherein, the data rate detector means adds up valid data periods in a predetermined period for detection including two or more isochronous cycles, and detects the data rate of MPEG data based on the added-up value.

12. The MPEG data recorder as claimed in claim **9**,

wherein, the data rate detector means adds up valid data
periods in a predetermined period for detection including two
or more isochronous cycles, and detects the data rate of MPEG
data based on the added-up value.